

**From:** Salire, Tess  
**Sent:** Monday, August 12, 2013 10:18 AM  
**To:** 'Russell Ray'  
**Cc:** lukejohnson@fortmojave.com; Smokeshop2@hotmail.com; Lisa Wayne  
**Subject:** RE: LUST Fort Mojave Smokeshop & Formal UST Closure Letter

Russell,

Please provide the following information to EPA within 45 days of release confirmation:



Thanks,  
Tess

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**From:** Russell Ray [<mailto:russellray@fortmojave.com>]  
**Sent:** Friday, August 09, 2013 5:08 PM  
**To:** Salire, Tess; Salire, Tess  
**Cc:** [lukejohnson@fortmojave.com](mailto:lukejohnson@fortmojave.com); [Smokeshop2@hotmail.com](mailto:Smokeshop2@hotmail.com); Lisa Wayne  
**Subject:** RE: LUST Fort Mojave Smokeshop & Formal UST Closure Letter

Hi Tess and Bobby,

First, attached is our formal intent to close the leaking UST at the Fort Mojave Smokeshop.

Second (Tess) – If my memory is correct, Bobby wanted more information on our contractor’s intent to burn the contaminated soil at the site, rather than dispose of it. Our contractor (if his bid is accepted) recommended this remedy.

Have a good weekend,

Russ

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**From:** Salire, Tess [<mailto:Salire.Tess@epa.gov>]  
**Sent:** Friday, August 09, 2013 5:00 PM  
**To:** Russell Ray  
**Subject:** RE: LUST Fort Mojave Smokeshop

Did Bobby raise the concern? Sorry, I was not copied on that email... or did he call you? I'll let you know if your response is ok.  
Tess

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**From:** Russell Ray [<mailto:russellray@fortmojave.com>]  
**Sent:** Friday, August 09, 2013 4:57 PM  
**To:** [Ohja.Bobby@epa.gov](mailto:Ohja.Bobby@epa.gov); Salire, Tess  
**Subject:** FW: LUST Fort Mojave Smokeshop

Hi Bobby and Tess,

You voiced your concern with incinerating the contaminated soil at the Fort Mojave Smokeshop LUST site where air emissions are concerned. I forwarded that question to Zelen Environmental (the firm likely to be given the remediation contract). Here is their response – is it satisfactory?

Let me know, and thanks.

Best Regards,

Russell Ray  
Environmental Operations Manager  
Fort Mojave Indian Tribe

500 Merriman Ave  
Needles, CA 92363

[russellray@fortmojave.com](mailto:russellray@fortmojave.com)  
(760) 326-9650

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**From:** Dennis Krantz [<mailto:dvkrantz@gmail.com>]  
**Sent:** Friday, August 09, 2013 1:56 PM  
**To:** Russell Ray; Mike K  
**Subject:** Re: LUST Fort Mojave Smokeshop

Russell,

To address your question, yes Zelen can conduct vapor sampling for you. We have conducted vapor sampling using probes placed below concrete slabs under buildings, as well as probes installed at multiple vertical horizons to establish a vertical profile of vapor concentrations. We have closed LUST sites in Arizona by estimating human health risk from vapor sample analyses using the Johnson-Ettinger model developed by the EPA. Keep in mind that sampling under a concrete slab under an active building can be very disrupting to the operations in the building because the concrete must be drilled to install the sampling probe, and the conduit to the probe must remain accessible for sample collection. As a first step I would recommend that you survey the property and immediately surrounding area and document the presence of basements (if any), concrete slabs, what kind of buildings overlie the slabs, and the distance of the slabs from the release. Has the EPA identified a time frame for the vapor migration testing?

Here are several resources from the EPA website regarding tank closure and vapor assessment:

[http://yosemite.epa.gov/r10/water.nsf/UST/UST+O&M/\\$FILE/IL-Closure-Guidance-0109.pdf](http://yosemite.epa.gov/r10/water.nsf/UST/UST+O&M/$FILE/IL-Closure-Guidance-0109.pdf)  
[http://www.epa.gov/oust/cat/pvi/pviwebinar\\_sampling\\_techniques\\_hartman.pdf](http://www.epa.gov/oust/cat/pvi/pviwebinar_sampling_techniques_hartman.pdf)  
<http://www.epa.gov/oust/ltffacts.htm>

The closure guidance is out of Region X but the recommendation is to follow procedures established by the state where the USTs are located. The following is a general outline of procedures. During closure of a tank we typically collect a soil sample from two feet below each end of the tank using a backhoe. The intent is to sample native material, not material used to bed the tank. For gasoline tanks we analyze the samples for benzene, toluene, ethylbenzene, and xylenes in accordance with EPA Method 8021B. After sampling, the excavation is backfilled with the excavated soil, plus enough clean fill to make up the volume of the tank that was removed. We do not take soil off site for treatment because the procedure is expensive and the un-excavated contamination must still be remediated using in-situ methods. The in-situ methods can be used for the entire remediation. If dispensers and piping are removed additional sampling is required in those areas.

To investigate a release from an underground storage tank system after the tank has been removed we start with a vertical borehole at the release point, sampling soil every five feet until non-detection for chemicals of concern is encountered, or groundwater is reached. With groundwater at about 15 feet below the surface in Mohave Valley, the release will undoubtedly extend to the groundwater. A groundwater monitoring well is then installed at the release for future monitoring. At least three additional boreholes are drilled around the release, and soil sampled and analyzed to establish the lateral extent of contamination from the release. If contamination exists at concentrations greater than cleanup standards then additional boreholes must be drilled farther from the release until the extent is established. If groundwater is impacted at least two additional monitor wells are installed, one down gradient to evaluate the migration of the release, and one cross gradient so the groundwater gradient can be calculated. Depending on the results of this work additional boreholes and monitor wells may be needed.

I hope this outline helps you with your planning. If you have questions please call or e-mail.

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Dennis Krantz  
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520-884-1846 office  
775-796-8858 fax  
520-465-3027 cell

On Fri, Aug 9, 2013 at 11:28 AM, Russell Ray <[russellray@fortmojave.com](mailto:russellray@fortmojave.com)> wrote:  
Dennis,

The Tribe is required to test for migration of vapor (related to the fuel leak) into basements and sewers (although basements aren't common in this area). Is this a service that Zelen will perform for the Tribe? Let me know, and thanks.

Russell Ray  
Environmental Operations Manager  
Fort Mojave Indian Tribe  
500 Merriman Ave  
Needles, CA 92363

[russellray@fortmojave.com](mailto:russellray@fortmojave.com)

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